What is claimed is:

1.   A game apparatus for moving a moving object on a road in a virtual world, comprising:

an input reception unit which receives an operational input from a player;

5   a storage unit which stores a condition of the moving object (including a position of the moving object) and a road condition of the road;

a calculation unit which calculates an influence received by the moving object based on the received operational input from the player, a stored current position of the moving object, and a road condition at the current position; and

10   an update unit which updates the stored condition of the moving object in accordance with the calculated influence, and updates the stored road condition in accordance with a change in the condition of the moving object.

2.   The game apparatus according to claim 1, wherein:

said storage unit further stores a velocity of the moving object as the condition of

15 the moving object;

said calculation unit calculates an acceleration of the moving object as the influence received by the moving object; and

said update unit updates the stored position and velocity of the moving object in accordance with the calculated acceleration.

20   3.   The game apparatus according to claim 2, wherein:

said storage unit stores a reference frictional force at each position on the road as the road condition; and

said calculation unit calculates the acceleration of the moving object by obtaining a frictional force given on the moving object by changing the stored "reference frictional

25 force at a current position of the moving object on the road" in accordance with a stored "current condition of the moving object".

4.   The game apparatus according to claim 2, further comprising a display unit,

wherein

said display unit displays at least one of the stored position and velocity of the moving object.

5.   The game apparatus according to claim 4, wherein:

5   said storage unit stores as the road condition, a passage number representing a number of times the moving object passes through a predetermined position on the road;

said update unit updates the stored passage number of the moving object in accordance with a change in the stored position of the moving object; and

said display unit further displays an image which is changed in accordance with the

10 stored passage number of the moving object.

6.   The game apparatus according to claim 2, wherein

said calculation unit calculates the acceleration of the moving object by obtaining a frictional force given on the moving object in accordance with the stored "passage number of the moving object at a current position on the road".

15   7.   The game apparatus according to claim 6, wherein

said calculation unit calculates the acceleration of the moving object in a manner that the acceleration increases as the stored "passage number of the moving object at the current position on the road" increases.

8.   The game apparatus according to claim 7, wherein:

20   said storage unit further stores an objective route within the road;

said update unit updates the stored objective route in accordance with the stored passage number of the moving object; and

said display unit further displays the stored objective route.

9.   A game method for moving a moving object on a road in a virtual world by

25 using a storage unit for storing a condition of the moving object (including a position of the moving object) and a road condition of the road, said method comprising:

an input receiving step of receiving an operational input from a player;

a calculating step of calculating an influence received by the moving object, based on the received operational input from the player, a stored current position of the moving object, and the road condition at the current position; and

an updating step of updating the stored condition of the moving object in accordance

5 with the calculated influence and updating the stored road condition in accordance with a change in the condition of the moving object.

10. A program for controlling a computer to function as:

an input reception unit which receives an operational input from a player;

a storage unit which stores a condition of a moving object (including a position of

10 the moving object) and a road condition of a road;

a calculation unit which calculates an influence received by the moving object based on the received operational input from the player, a stored current position of the moving object, and the road condition at the current position; and

an update unit which updates the stored condition of the moving object in

15 accordance with the calculated influence, and updates the stored road condition in accordance with a change in the condition of the moving object.

11. A computer-readable information recording medium storing a program for controlling a computer to function as:

an input reception unit which receives an operational input from a player;

20 a storage unit which stores a condition of a moving object (including a position of the moving object) and a road condition of a road;

a calculation unit which calculates an influence received by the moving object based on the received operational input from the player, a stored current position of the moving object, and the road condition at the current position; and

25 an update unit which updates the stored condition of the moving object in accordance with the calculated influence, and updates the stored road condition in accordance with a change in the condition of the moving object.